

RICE UNIVERSITY

**Indiscrete Adjacency**



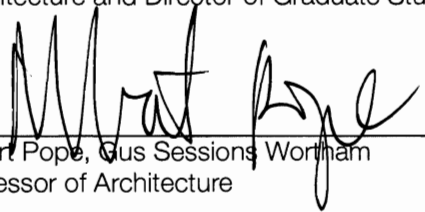
by

**David Jefferis**

A THESIS SUBMITTED  
IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE DEGREE

**Master of Architecture**

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MAY 2011

## ABSTRACT

### **Indiscrete Adjacency**

by

David Jefferis

This thesis establishes indiscrete adjacency as an organization that can synthesize formerly discrete programs to produce integration and cross-fertilization across programmatic boundaries.

Indiscrete space moves beyond cellular and continuous spatial models to produce fluctuating hierarchies of organization, program, circulation and form. The effect of these multiple hierarchies is a pervasive condition of simultaneously belonging to many spaces.

The increasing number and complexity of activities, occupants, and group identities in an elementary school can no longer be organized by simple adjacency between discrete cells. Indiscrete adjacency is proposed as a model able to manage this complexity by producing spaces with allegiances to several programs at once.

## Acknowledgements

Thank you to

**Ron Witte** for his energy and commitment to the project, and for teaching me how to have fun with form.

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**My family** for believing in me.

**Jared, Carolyn and Madeleine** for putting things in perspective.

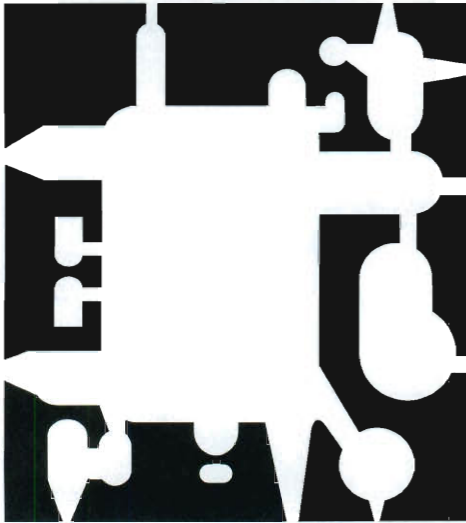
**My wife** for sharing this experience with me, and most of all for her patience and encouragement during the most difficult parts of the semester.

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## **Formal Diagrams**

Replacing the simple inside-outside dialectic of figure and ground with the overlapping inhabitation of the plenum's focus on space and surface.

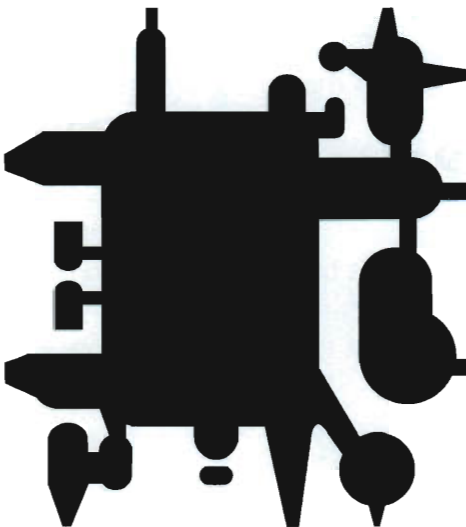


## Pervasive Interior

### Poche

The massive layer between inside and outside can be hollowed out for secondary functions adjacent to the central hall.

These secondary functions establish a another scale of interior between the outside and primary inside of the main hall. The resulting attenuated poche remains opaque.

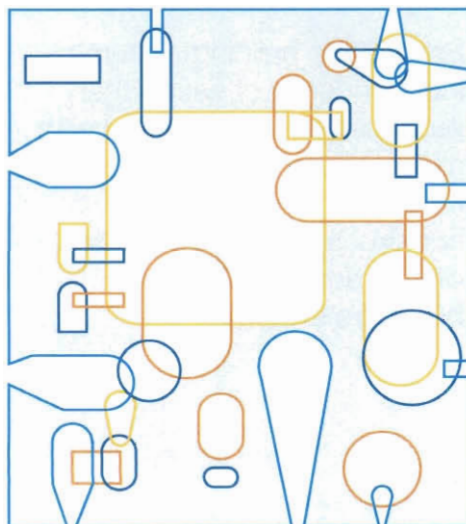


## Iconic Enclosure

### Shape

Inverting the poche diagram dramatically increases the amount of surface contact between interior and exterior.

The form of the interior is visible. The continuous exterior surface more explicitly defines inside and outside, with no space available for the in-between states of a poche wall.



## Overlapping Inhabitation

### Plenum

The relations between inside and outside shift depending on the location of the subject in relation to the multiple surfaces.

Each space becomes a plenum, full of relations between surfaces, neither inside nor outside but both at once.

## **Simple Adjacency**

Cellular organization privileges the spatial or programmatic unit. Floors, walls and ceilings form an enclosing mass around this unit.

## **Discrete Systems**

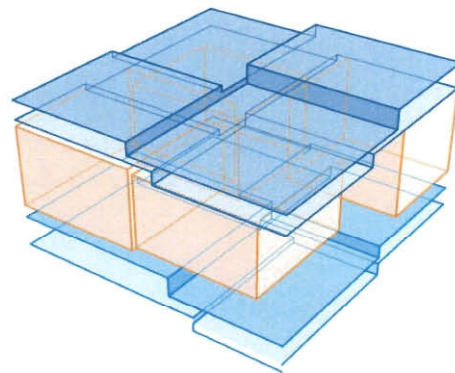
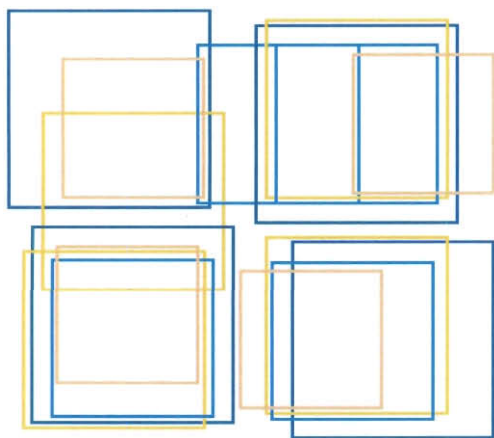
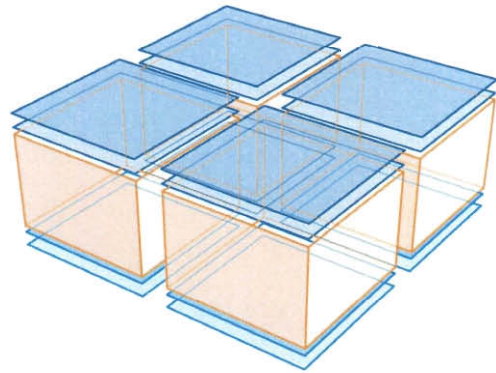
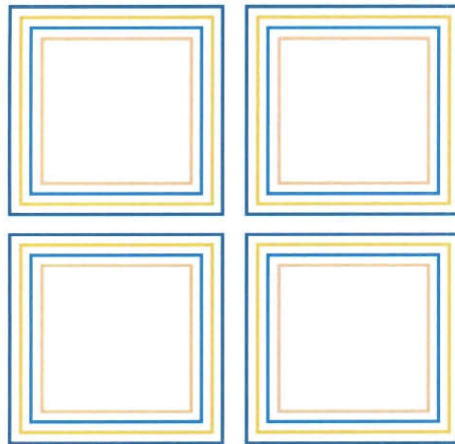
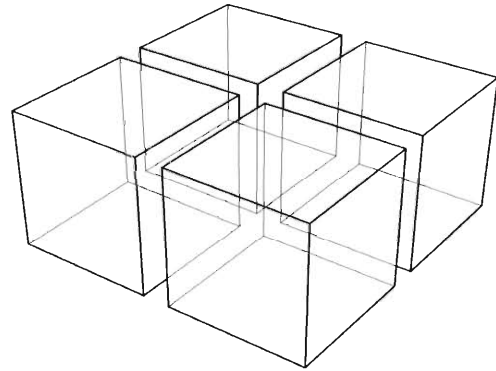
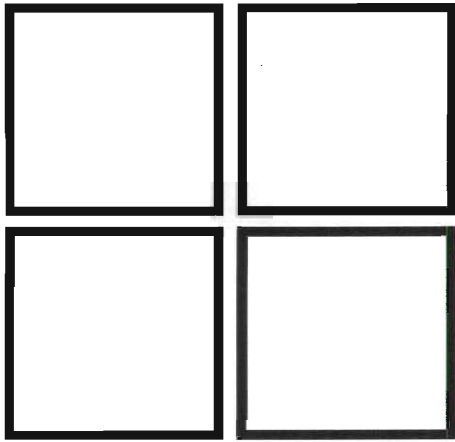
Treating the floors, walls and ceilings as separate systems allows them to operate independently of the enclosed program. However, these systems tend to nest within each other. Program is still encased within the enclosure.

## **Indiscrete Adjacency**

Shifting the building systems independently of each other produces spaces affiliated with multiple systems. Enclosure is necessarily incomplete; it is constructed through relations of difference between the building's systems.

## **Building Systems**

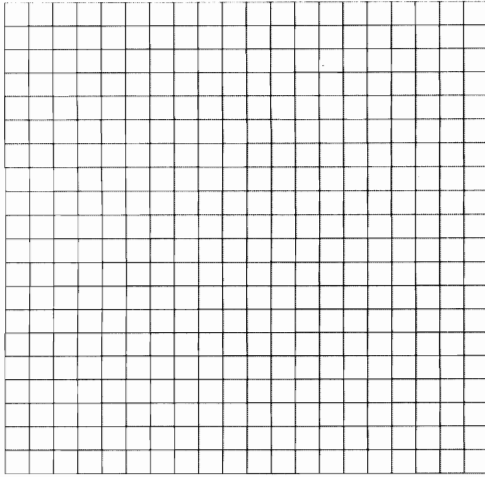
Exploding the discrete cell into floor, wall, and ceiling components allows these systems to slip past each other.





## **Geometry**

The geometry of a figured grid becomes a metaplan for the building. The floors, walls, and ceilings themselves are not allowed to remain discrete systems, but are imprinted this geometry.

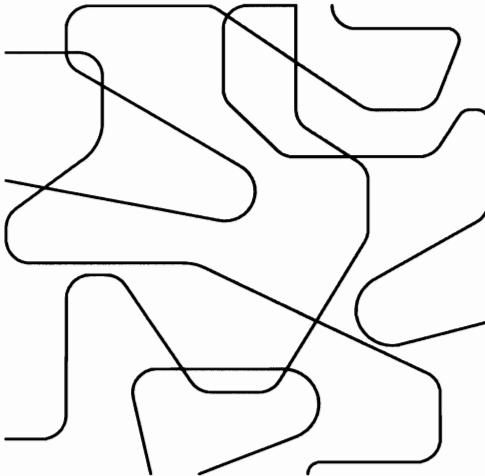


## Persistent Illegibility

### The Grid

Uniform system

Similarity at local points

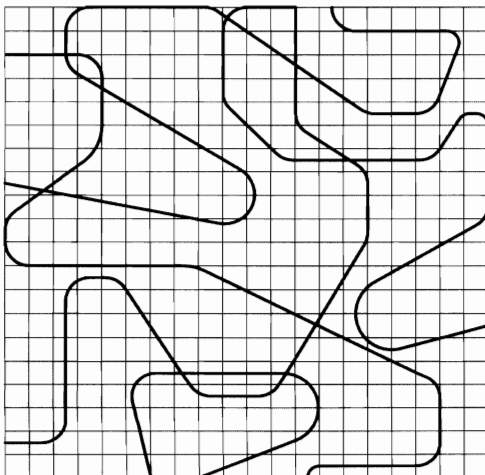


## Directed Legibility

### The Figure

Distinct systems

Difference at local points

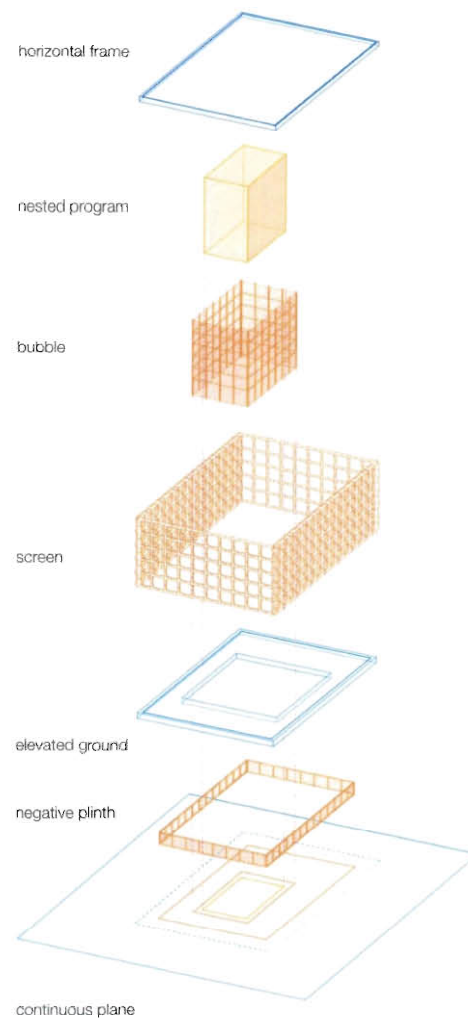
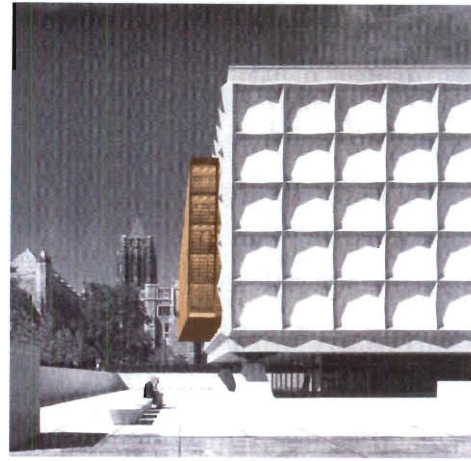


## Fluctuating Legibility

### The Figured Grid

Distributed system

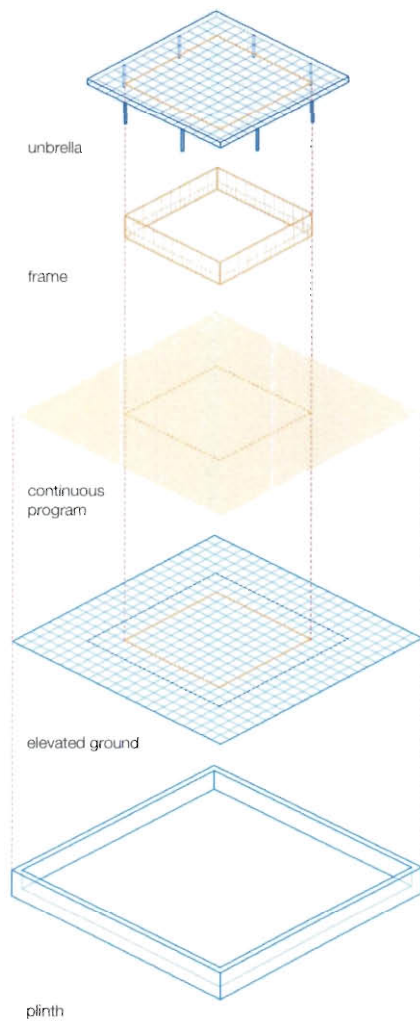
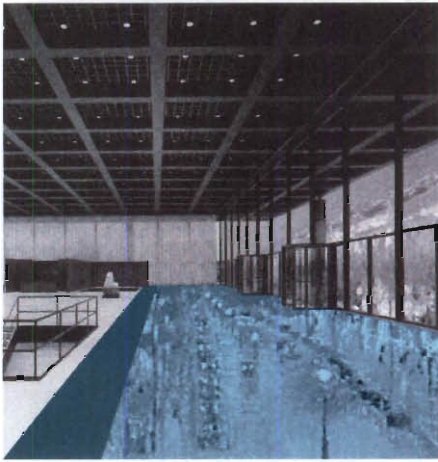
Multiple allegiances at local points



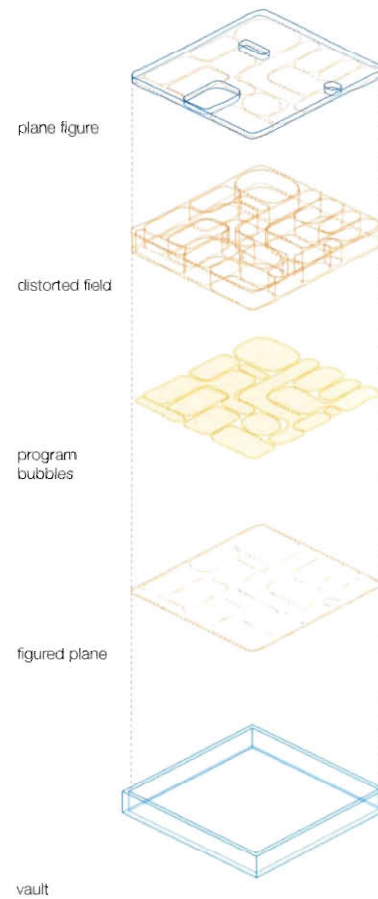
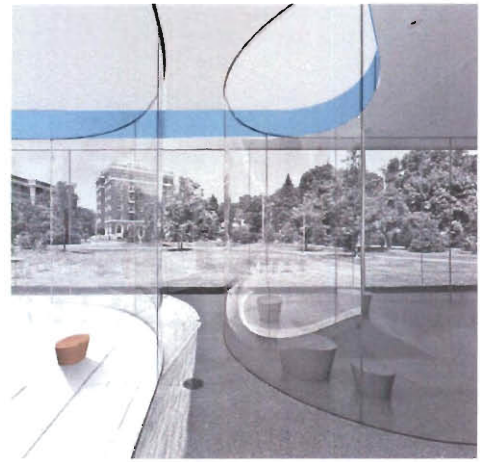
## Altered States: Precedents

The nested systems of the case study buildings were reconfigured according to the logic of the slipped surface.

**Beinecke Rare Book Library**  
Gordon Bunschaft / SOM



**New National Gallery**  
Ludwig Mies van der Rohe



**Toledo Glass Museum**  
SANAA



Houston, TX

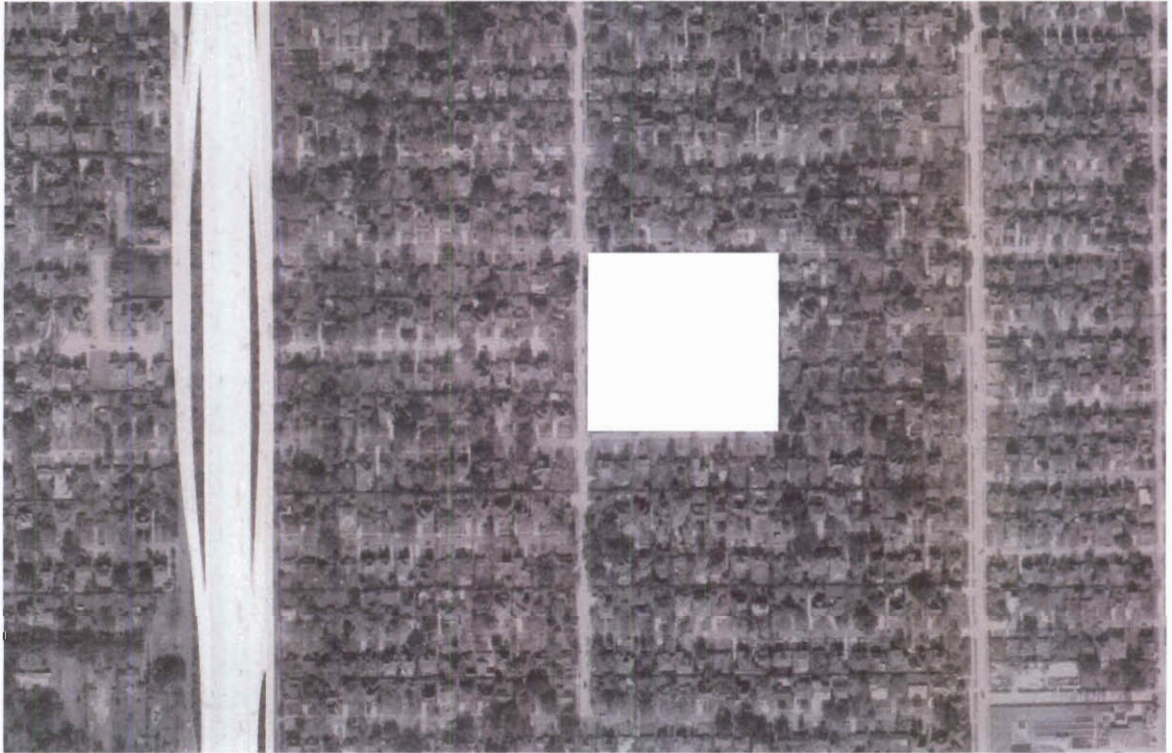


Bellaire

## Site Selection

Houston renovates and expands School Infrastructure wholesale by passing bond initiatives. Of the 19 Elementary Schools being built or augmented across the city, desire for minimal contextual influence prompted selection of the site in Bellaire.





Project Site

## **Simple Adjacency**

### **Workhorse**

Primary figure organizing classrooms and administration.

### **Bubble**

A unique condition: the figure operating in isolation.

### **Inside-Outside**

Interior and exterior spaces merge with each other.

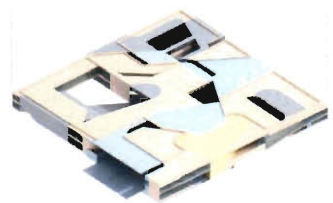
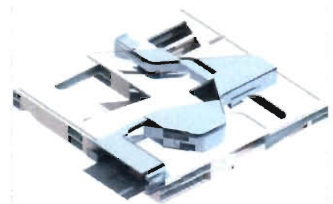
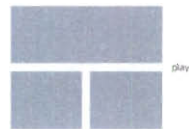
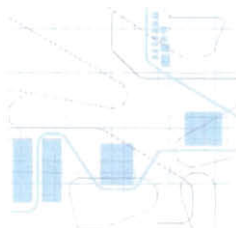
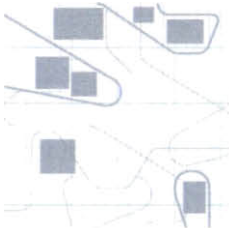
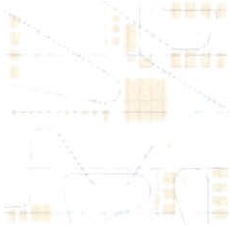
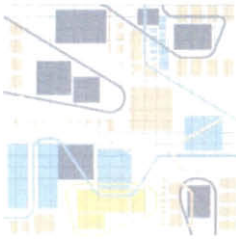
### **Public Pathway**

The figure as a void individuates the primary public path through the building.

## **Deploying the Figure: Program**

The thesis claims indiscrete adjacency as a model able to manage the number and complexity of activities, occupants, and group identities in an elementary school by producing spaces with allegiances to several programs at once.

### **Indiscrete Adjacency**





Roof Plates

Level 2 Ceilings

Level 2 Walls

Level 2 Floors

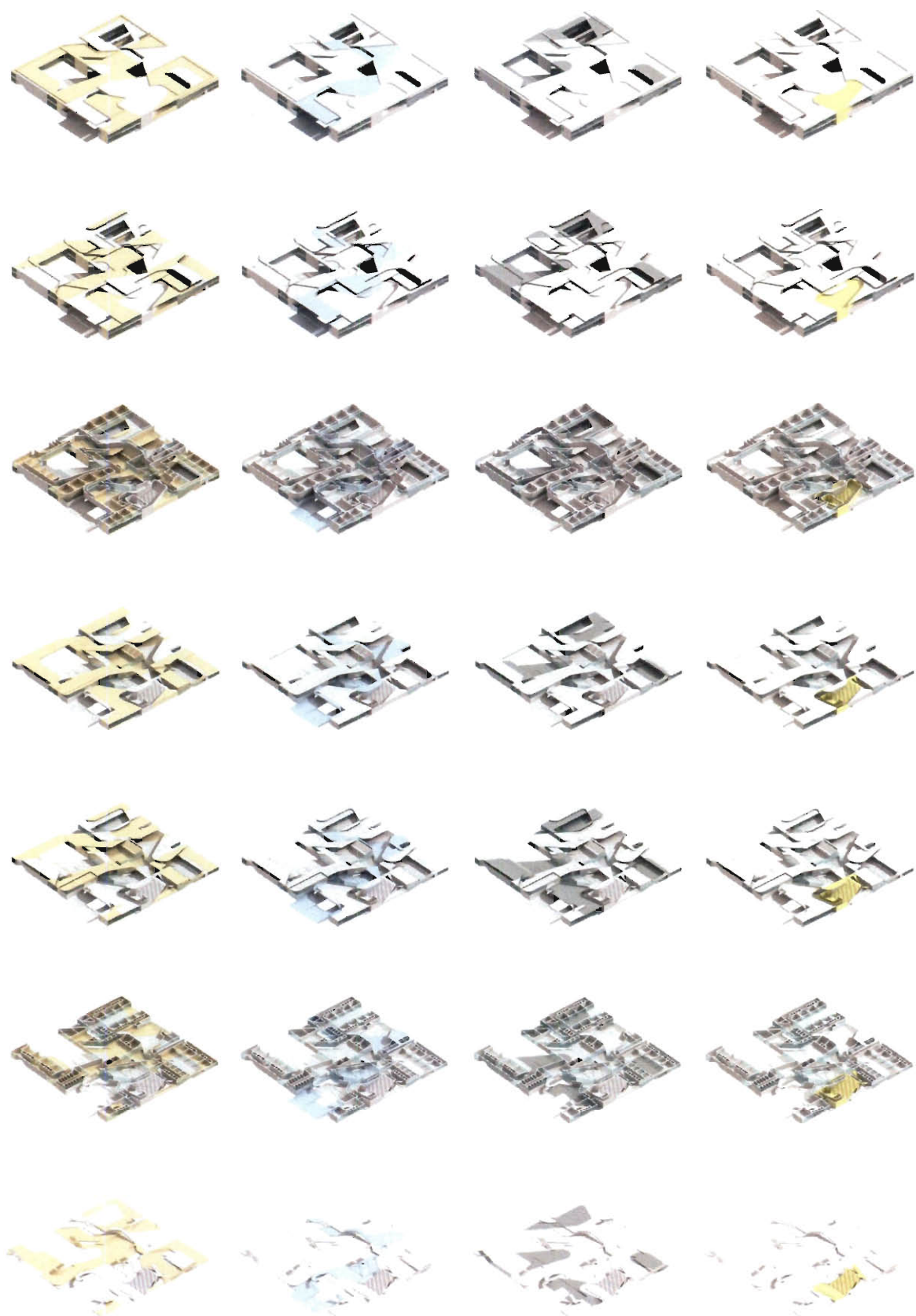
Level 1 Ceilings

Level 1 Walls

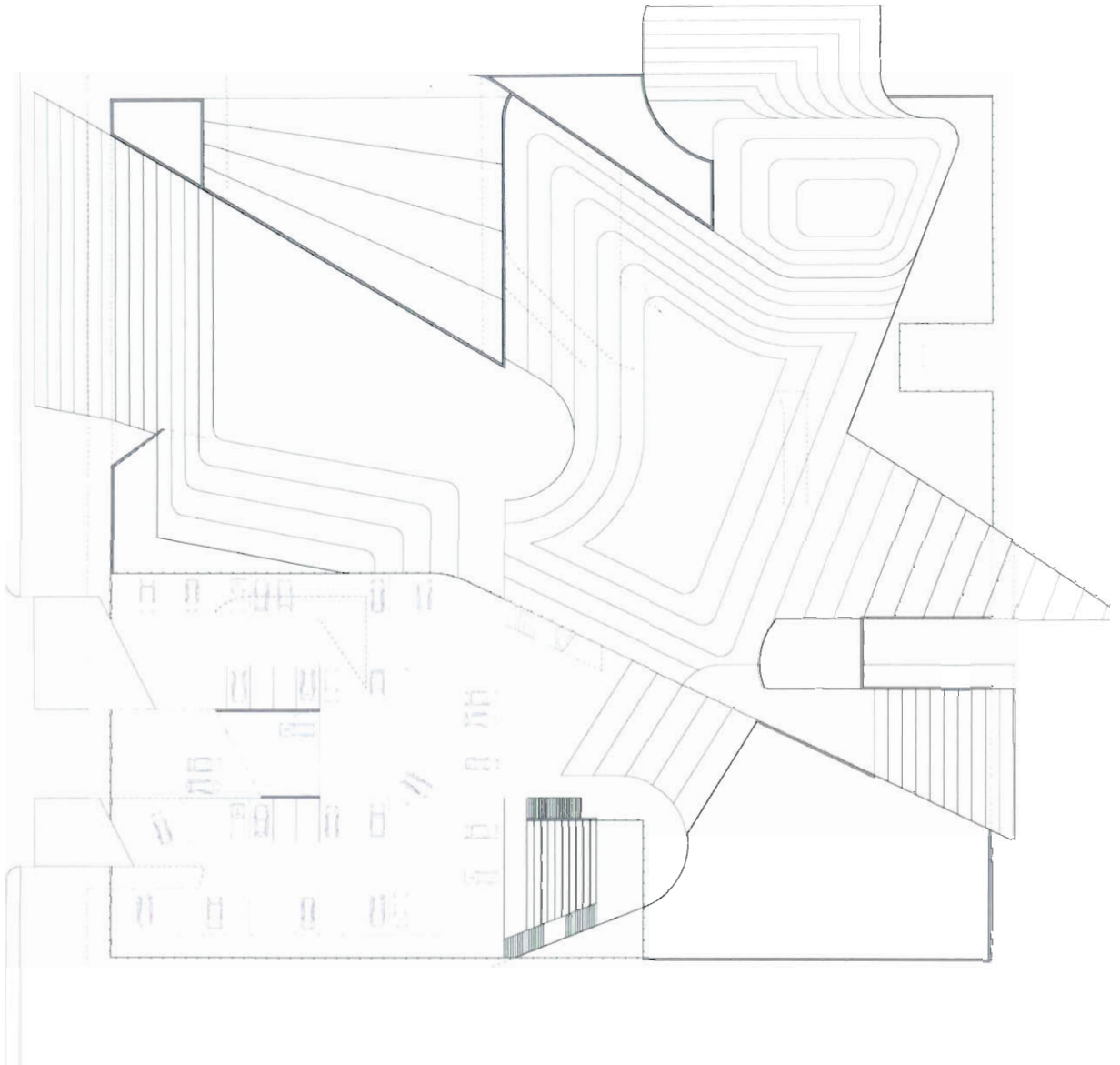
Level 1 Floors

**Deploying the Figure:**  
Building Systems

The figures are constructed by combinations of different building systems, in this case floor, wall and ceiling, linking the legibility of these figures to their performance as architecture.





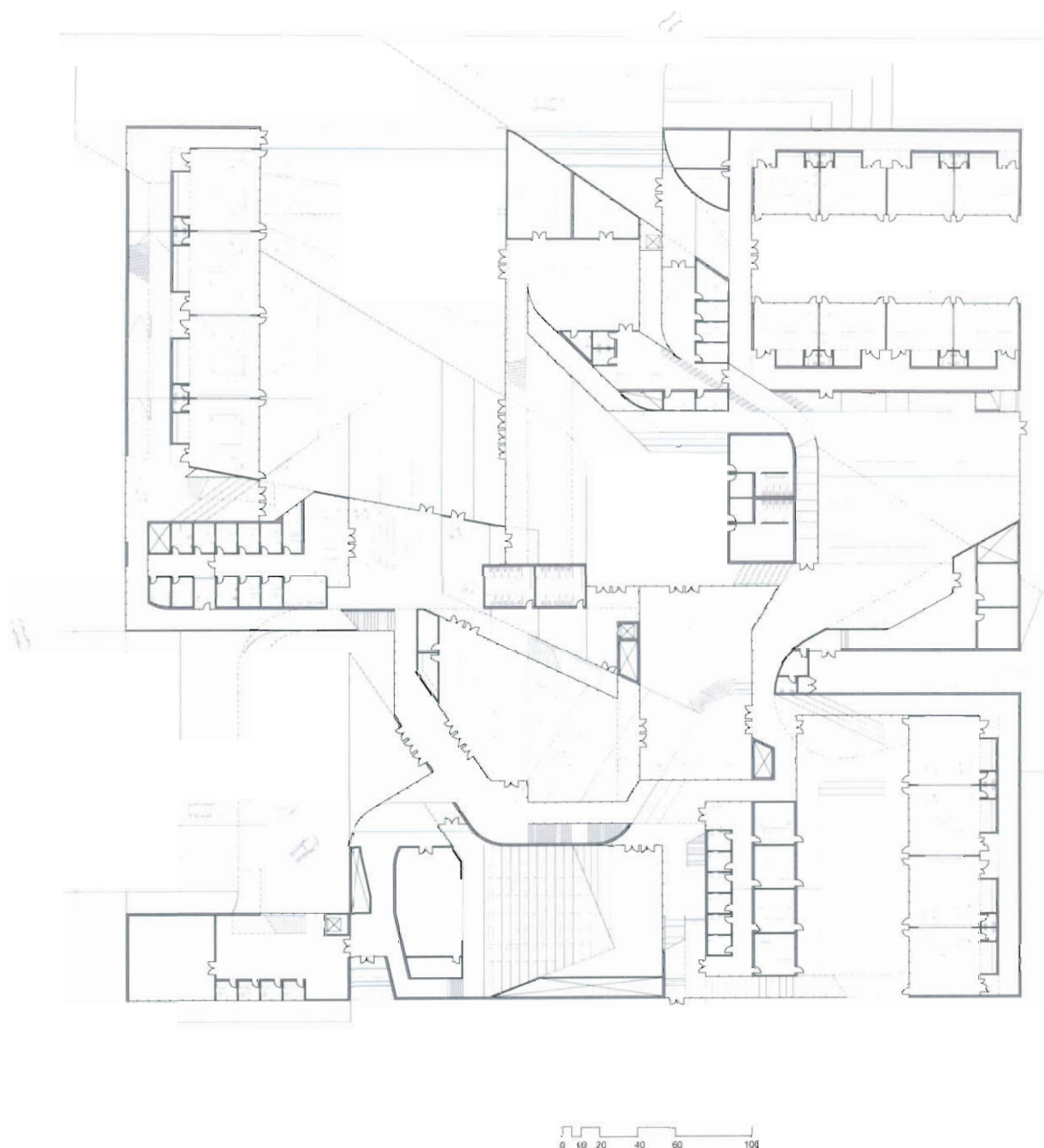


0 10 20 40 60 100

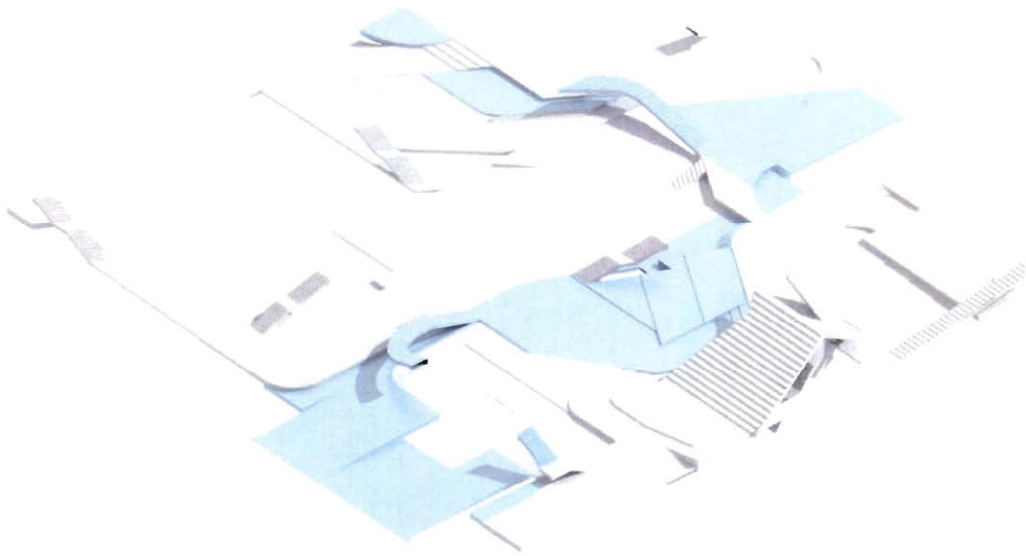


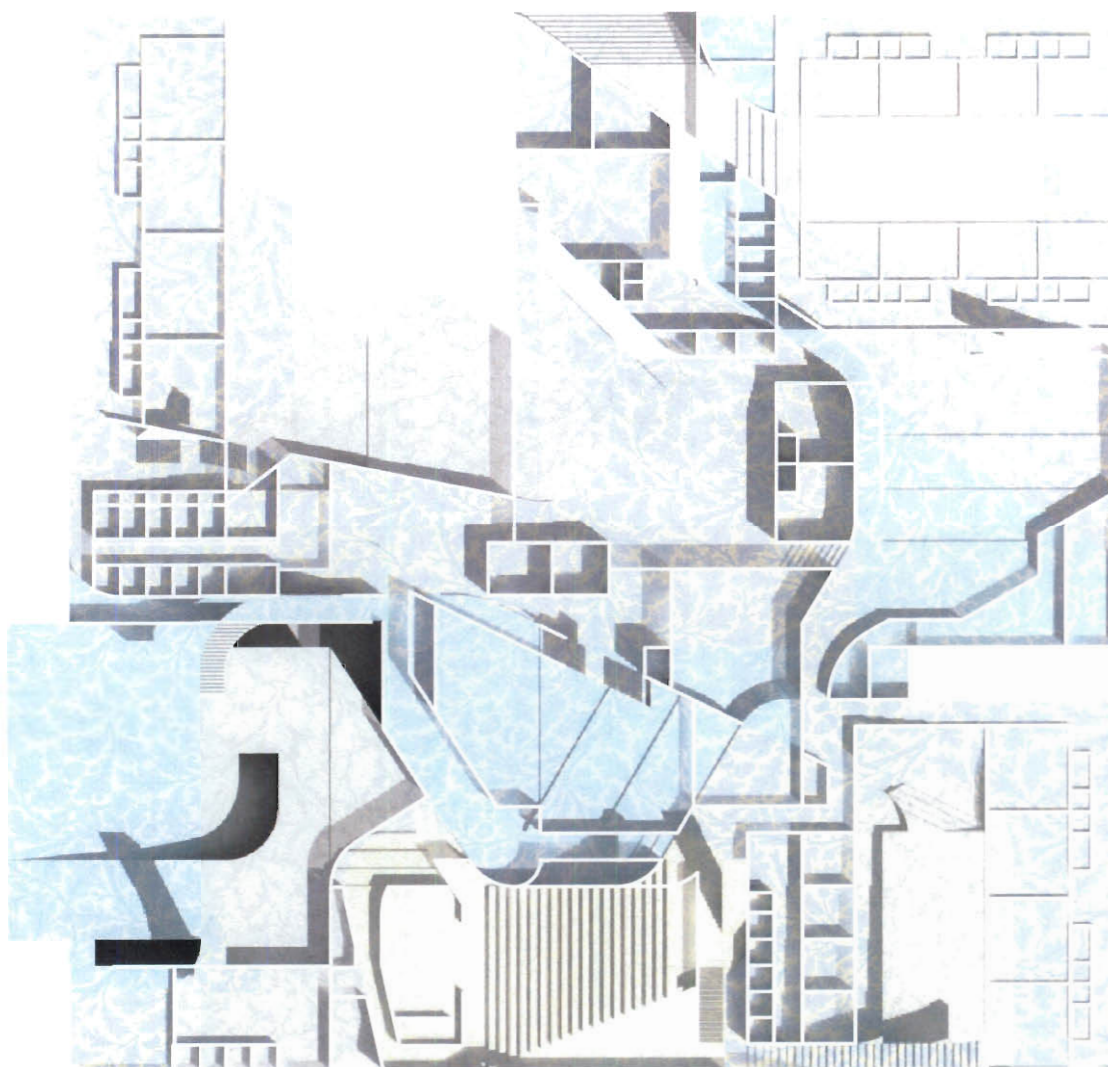
**Ground Floor Plan**





**First Floor Plan**

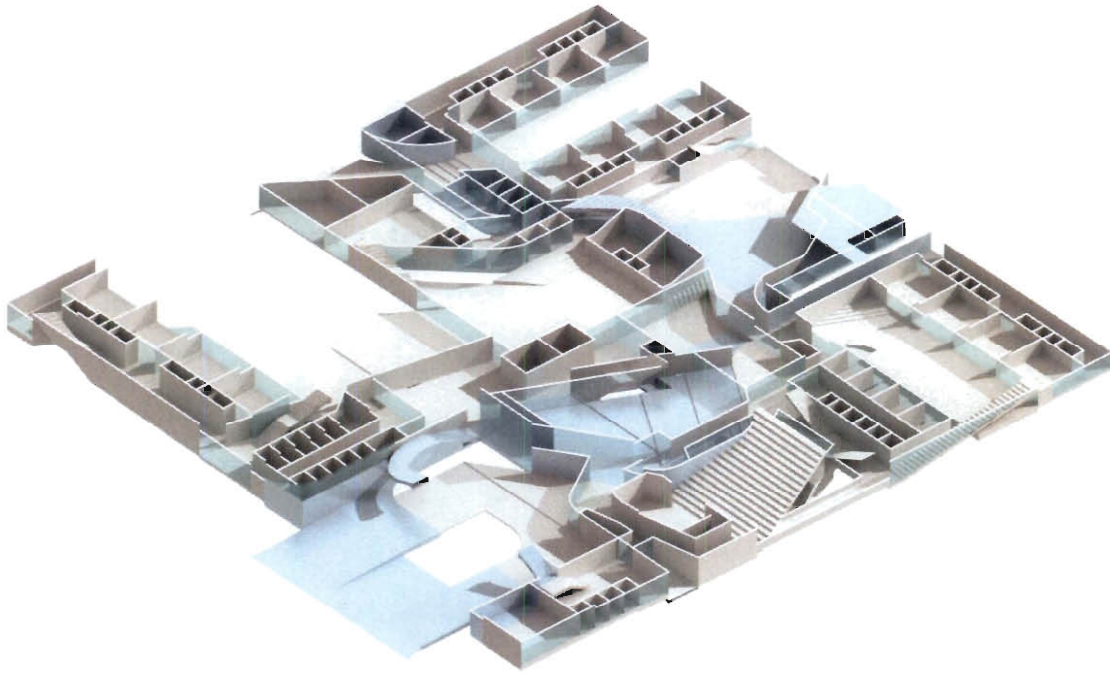




## Plinths

Level 1 Floor Plates

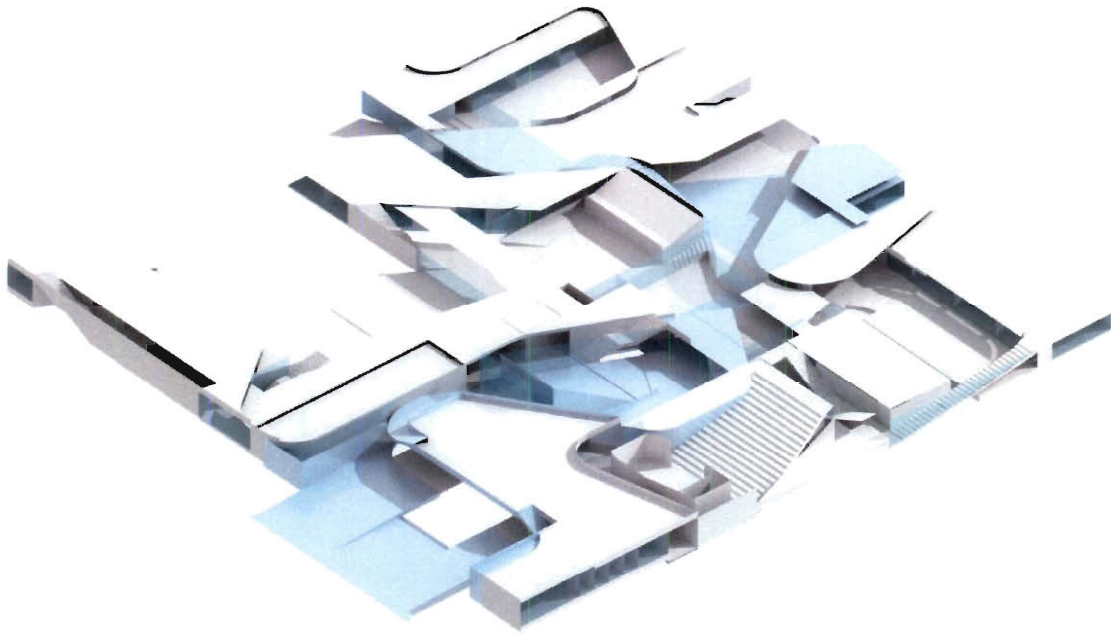


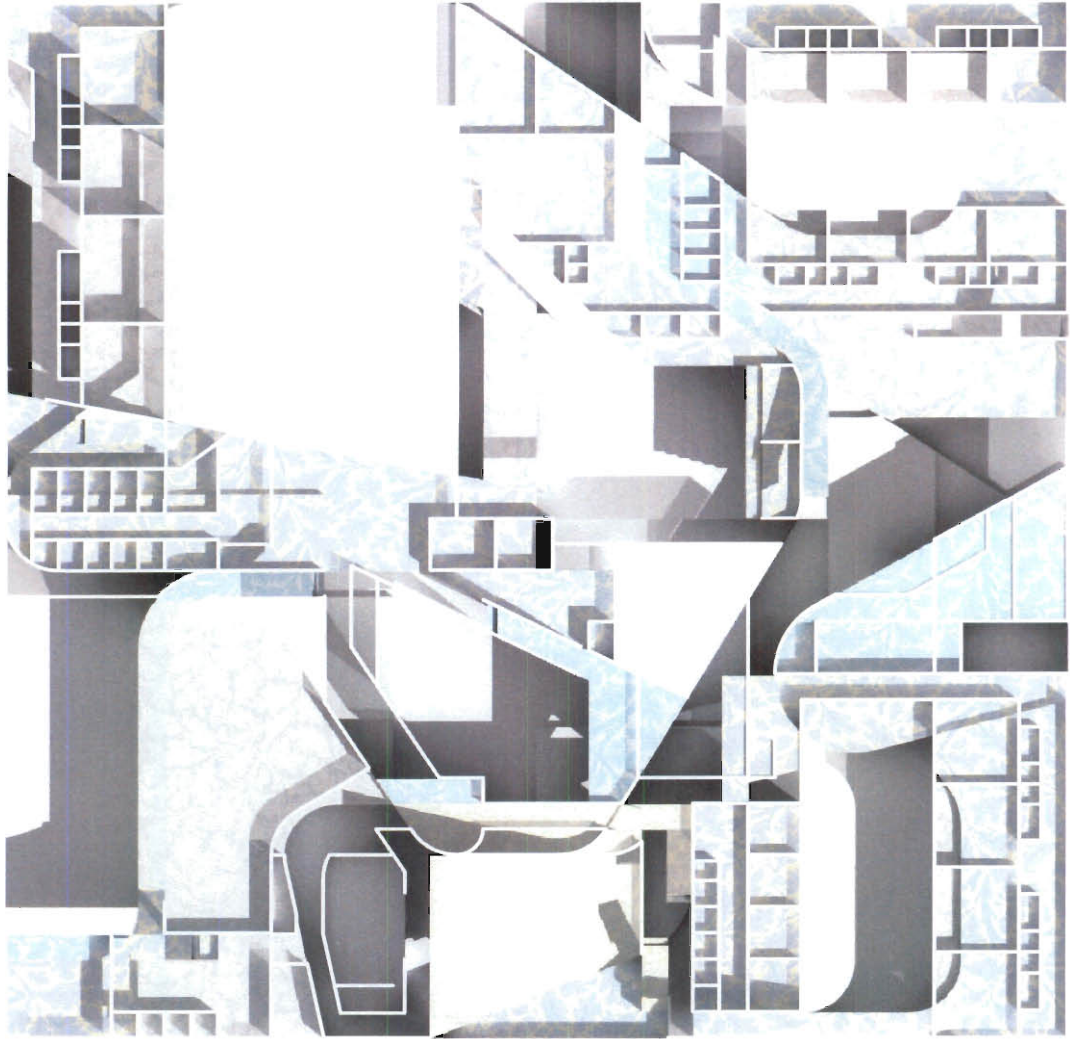




## Patches

Level 1 Program

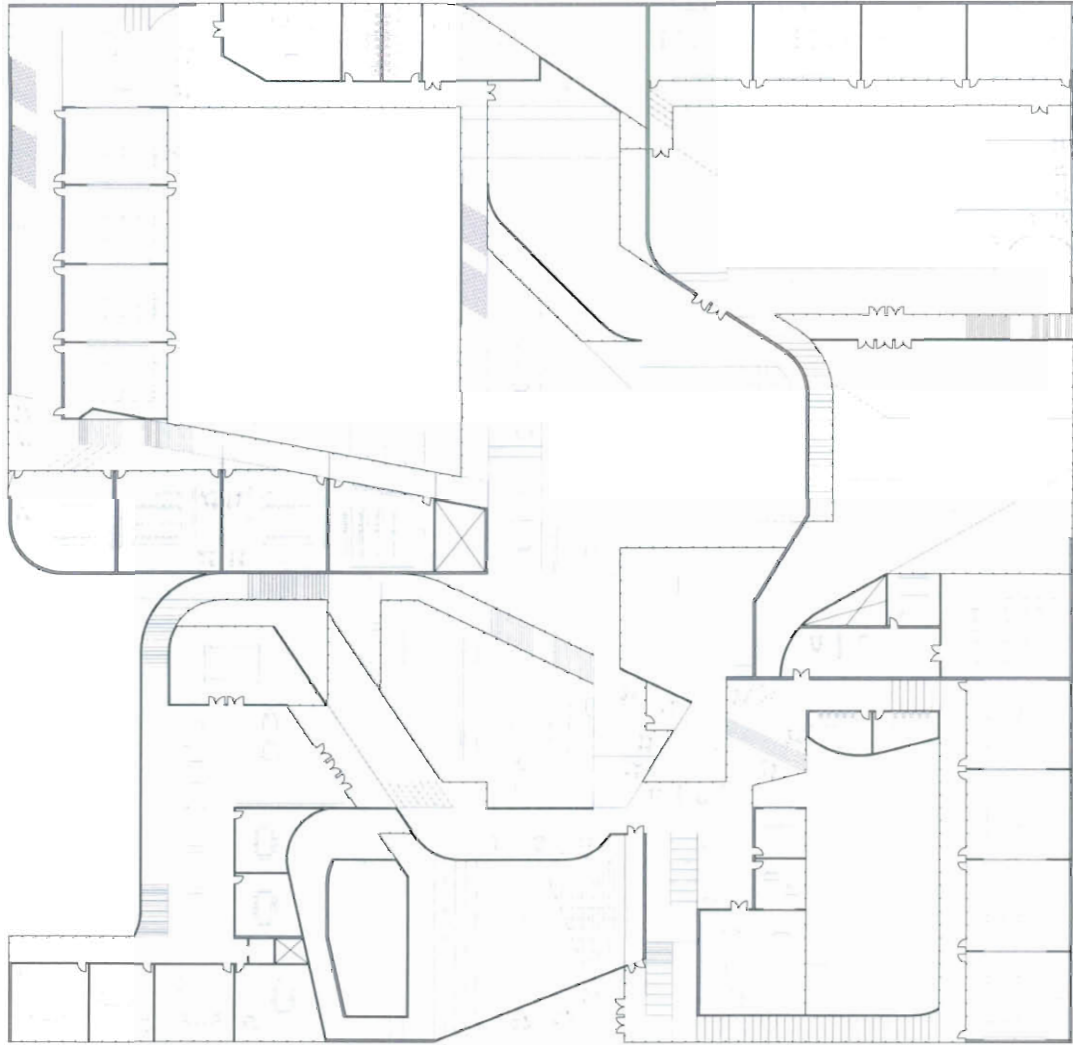




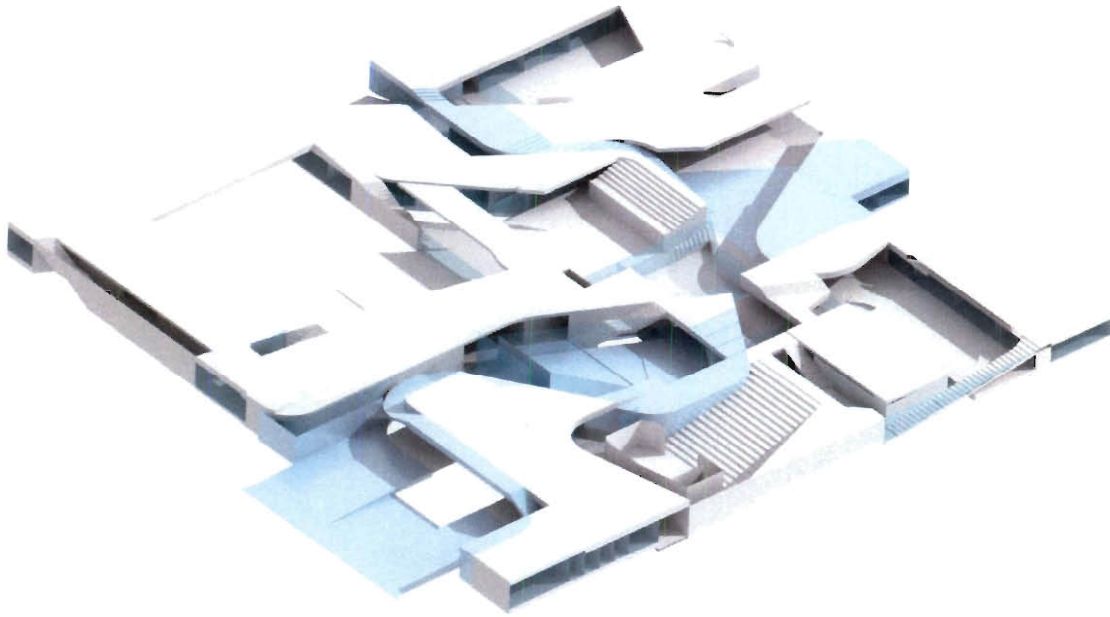
## **Umbrellas**

Level 1 Ceiling Plates

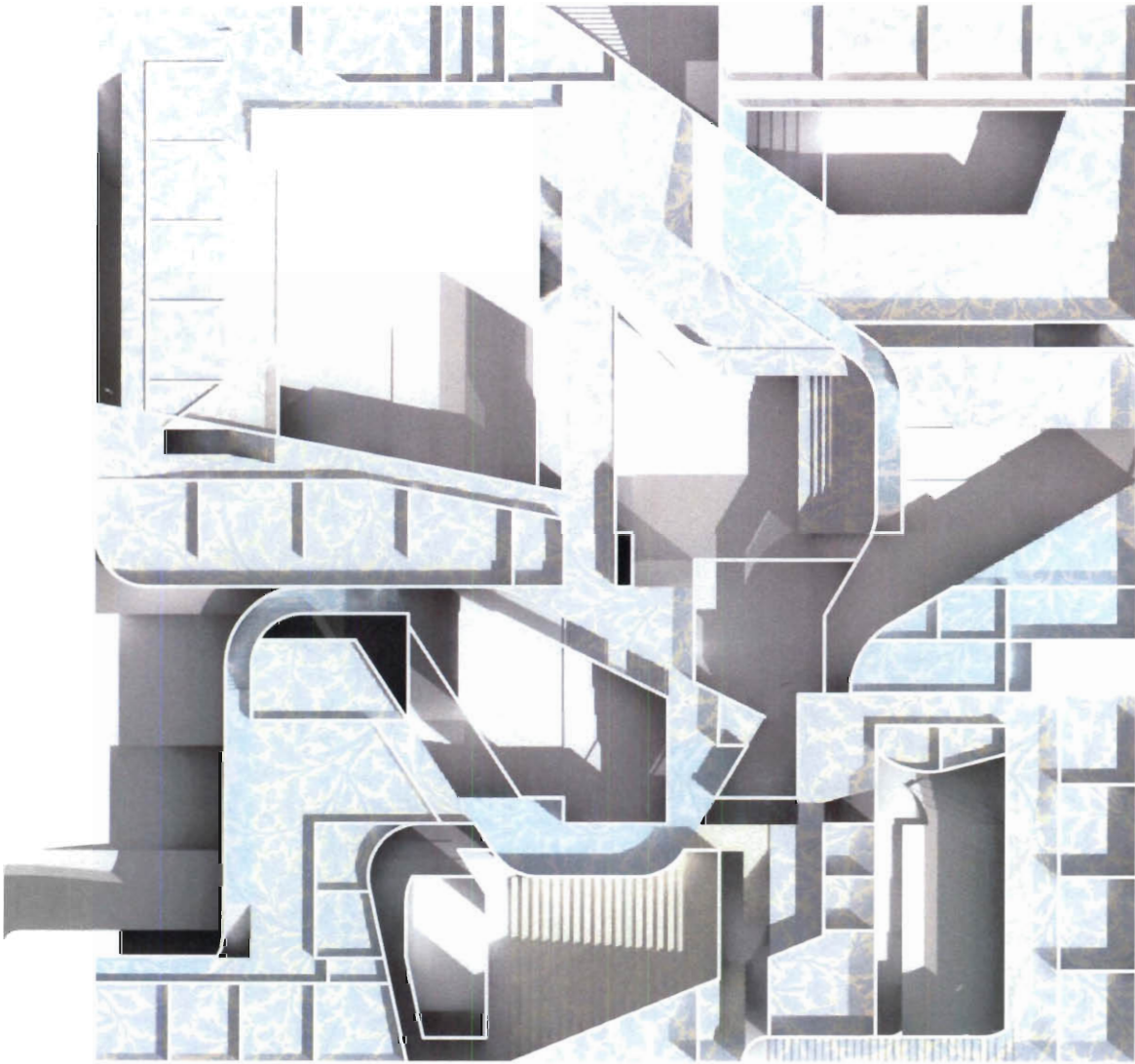




**Second Floor Plan**



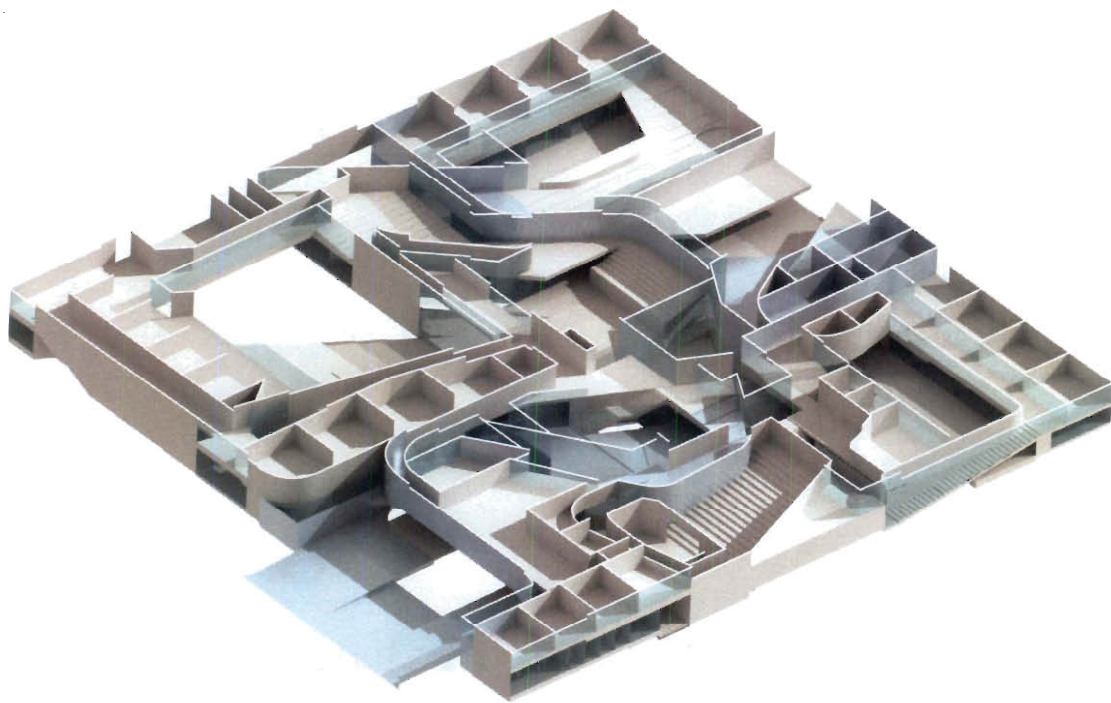


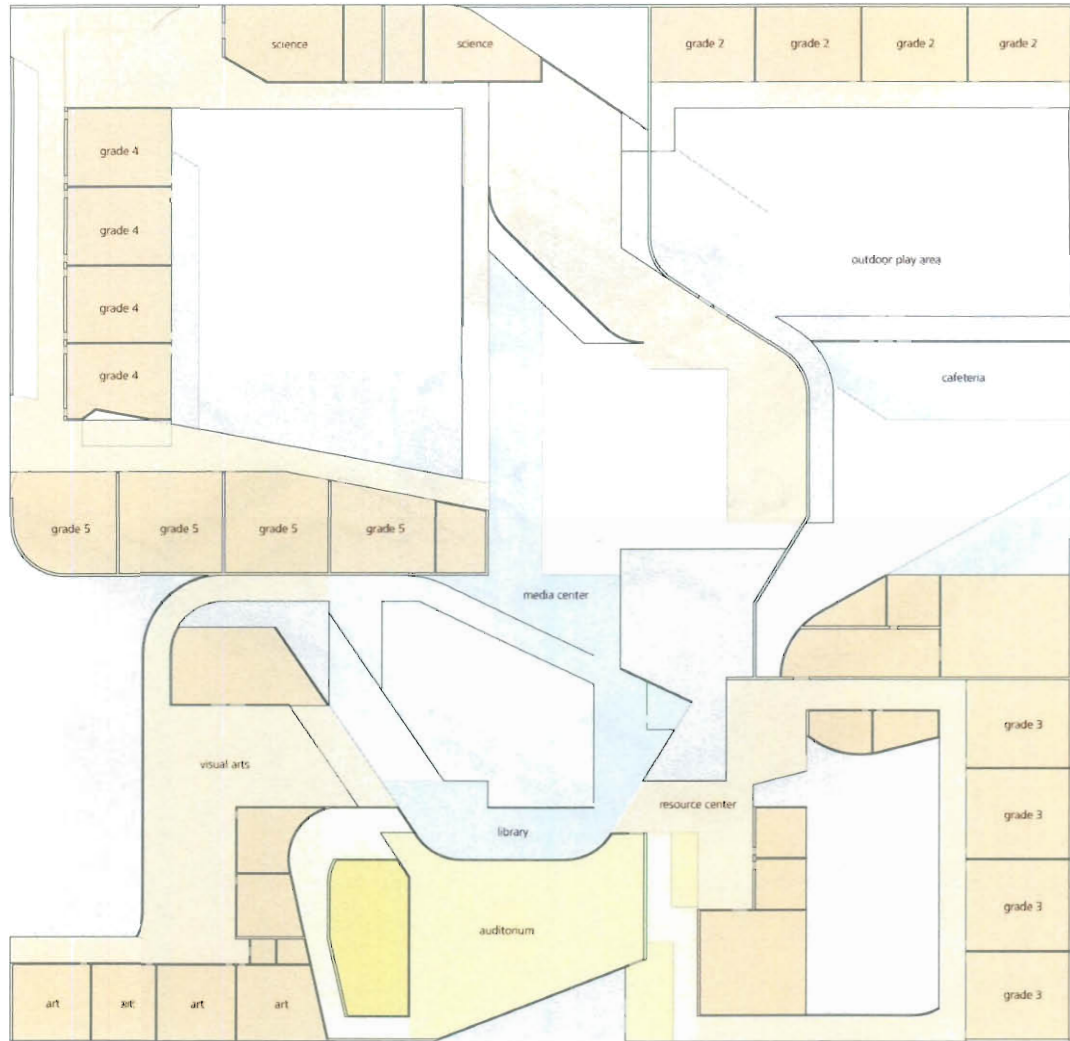


## Plinths

Level 2 Floor Plates

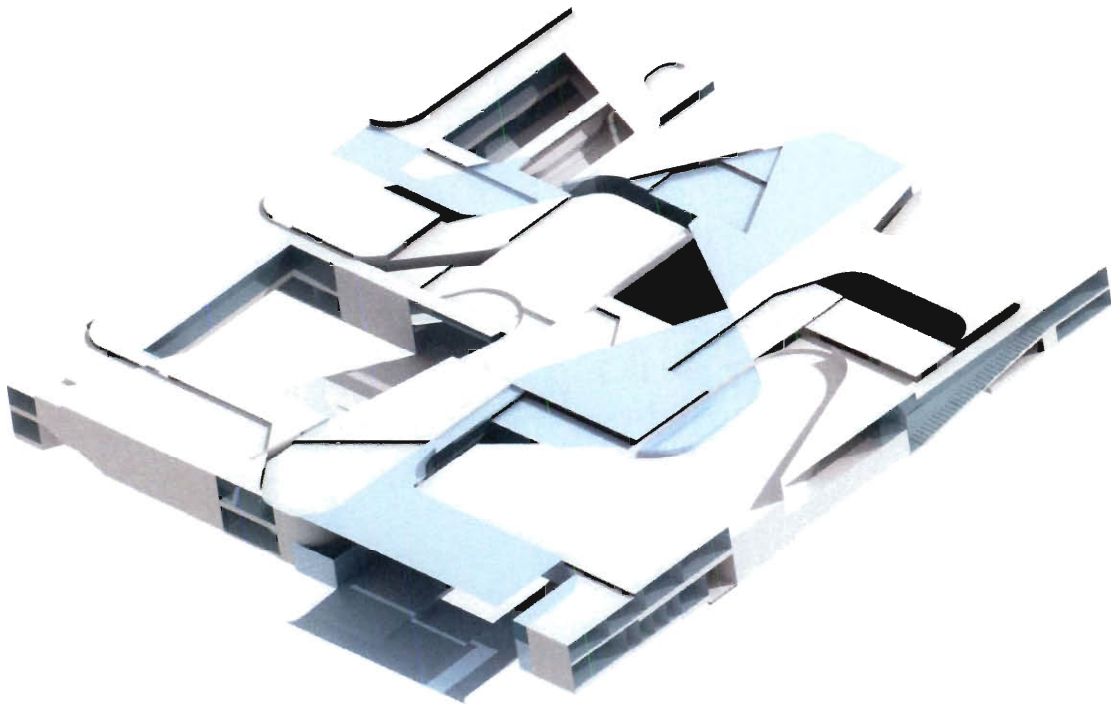


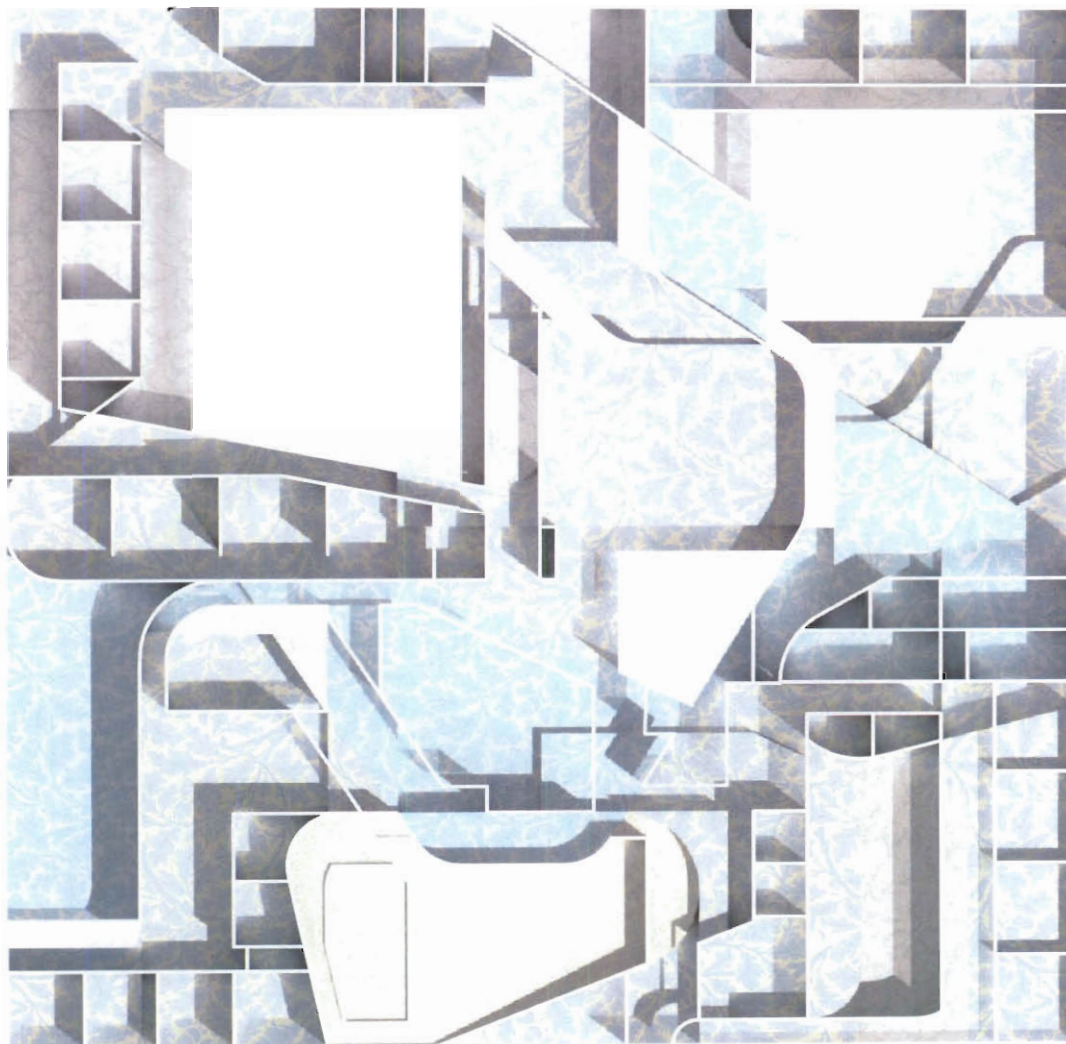




## Patches

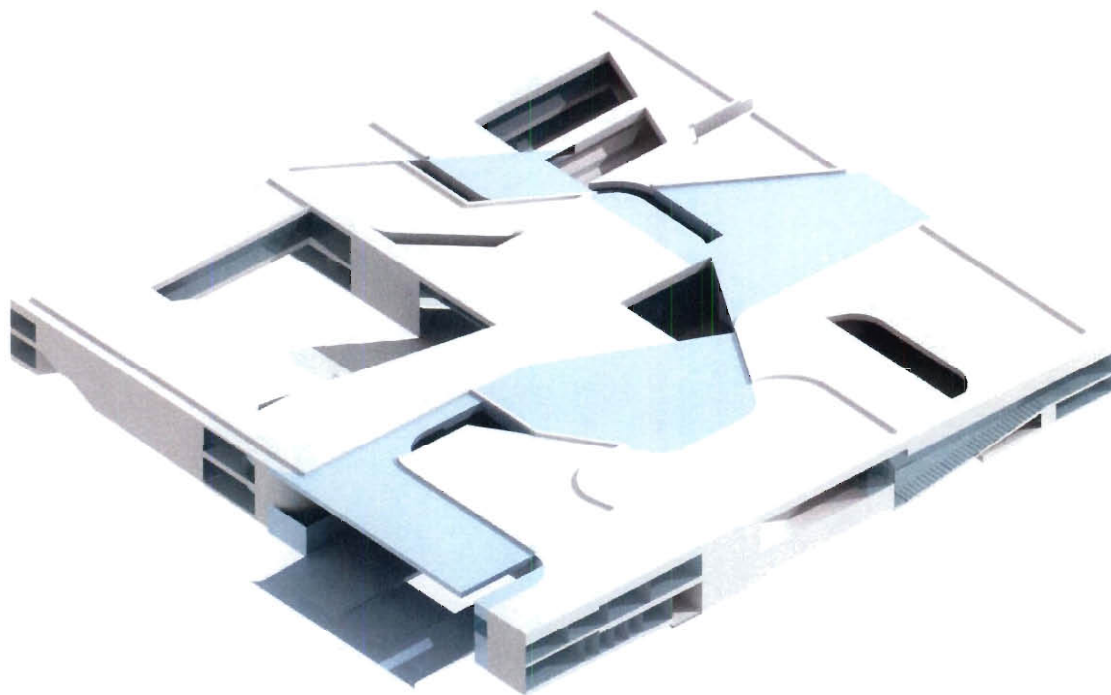
Level 2 Program





## **Umbrellas**

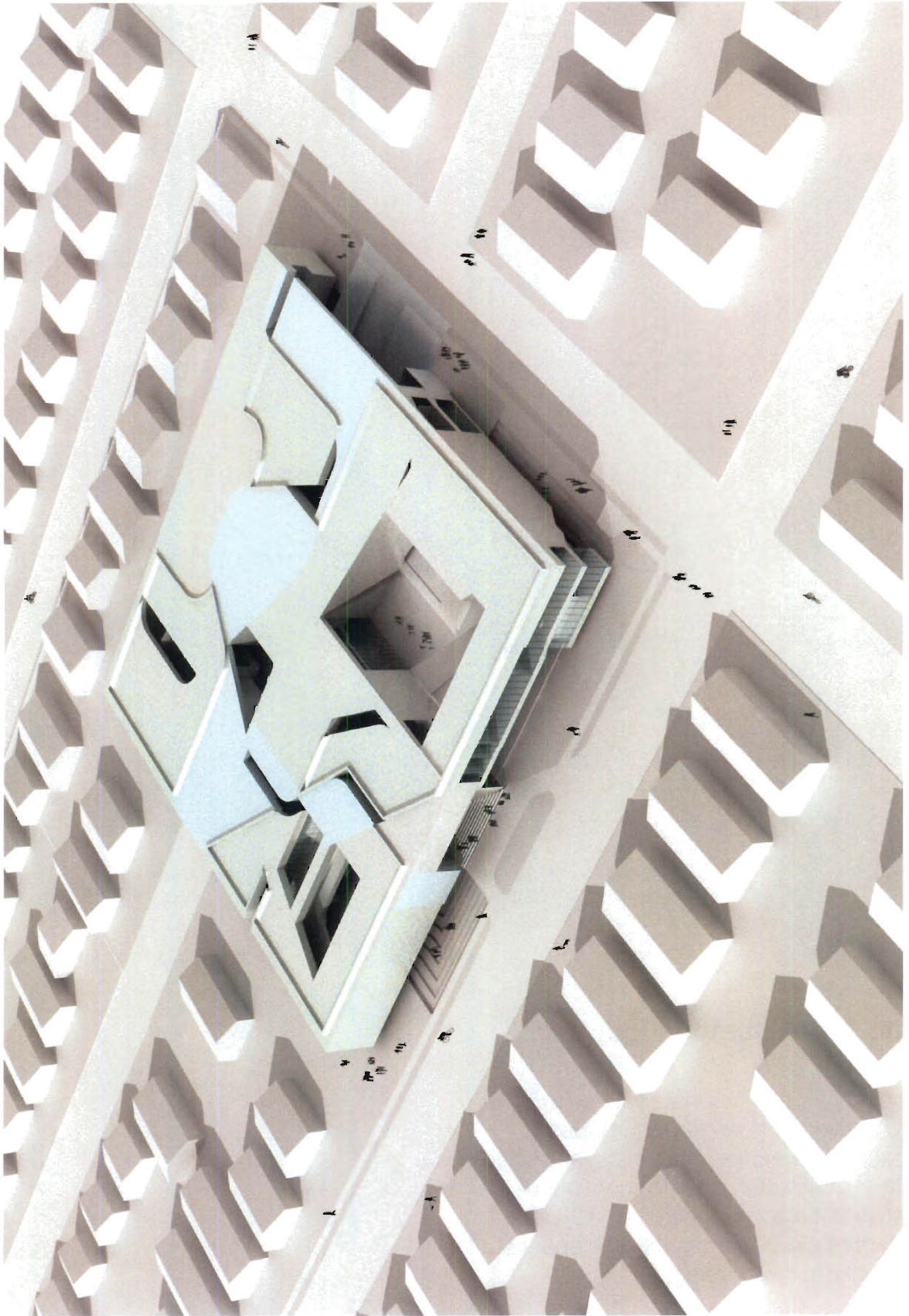
Level 2 Ceiling Plates

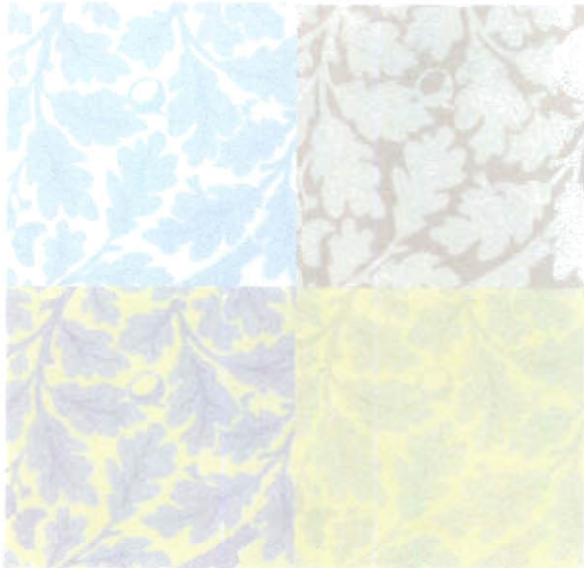


## Figured Plane

Roof Plates







## **The Art of Camouflage**

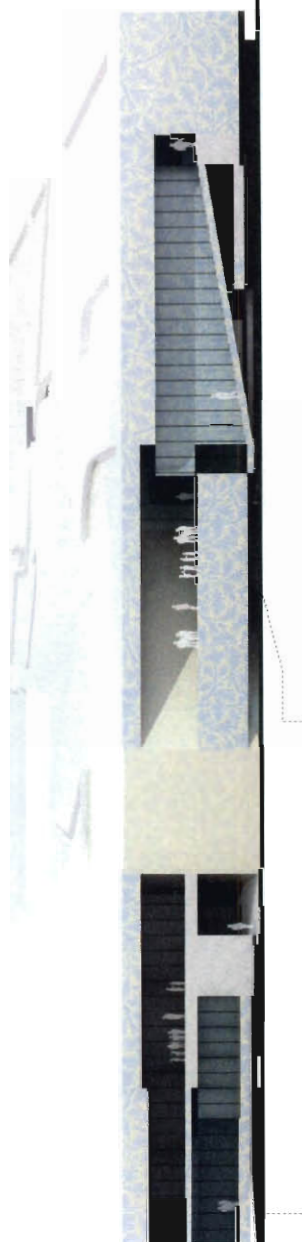
Four colors that resonate with each other are applied to a single pattern. Each space remains distinct but is synthesized in two ways: the pattern is continuous between adjacent spaces, and the colors resonate across multiple spaces throughout the building.







South Elevation



## The Figure and the Frame: Elevations

The figures press and deform against the exterior frame of the building, generating partial legibility for the programs inside by altering the direct relationship between program and surface material expression.

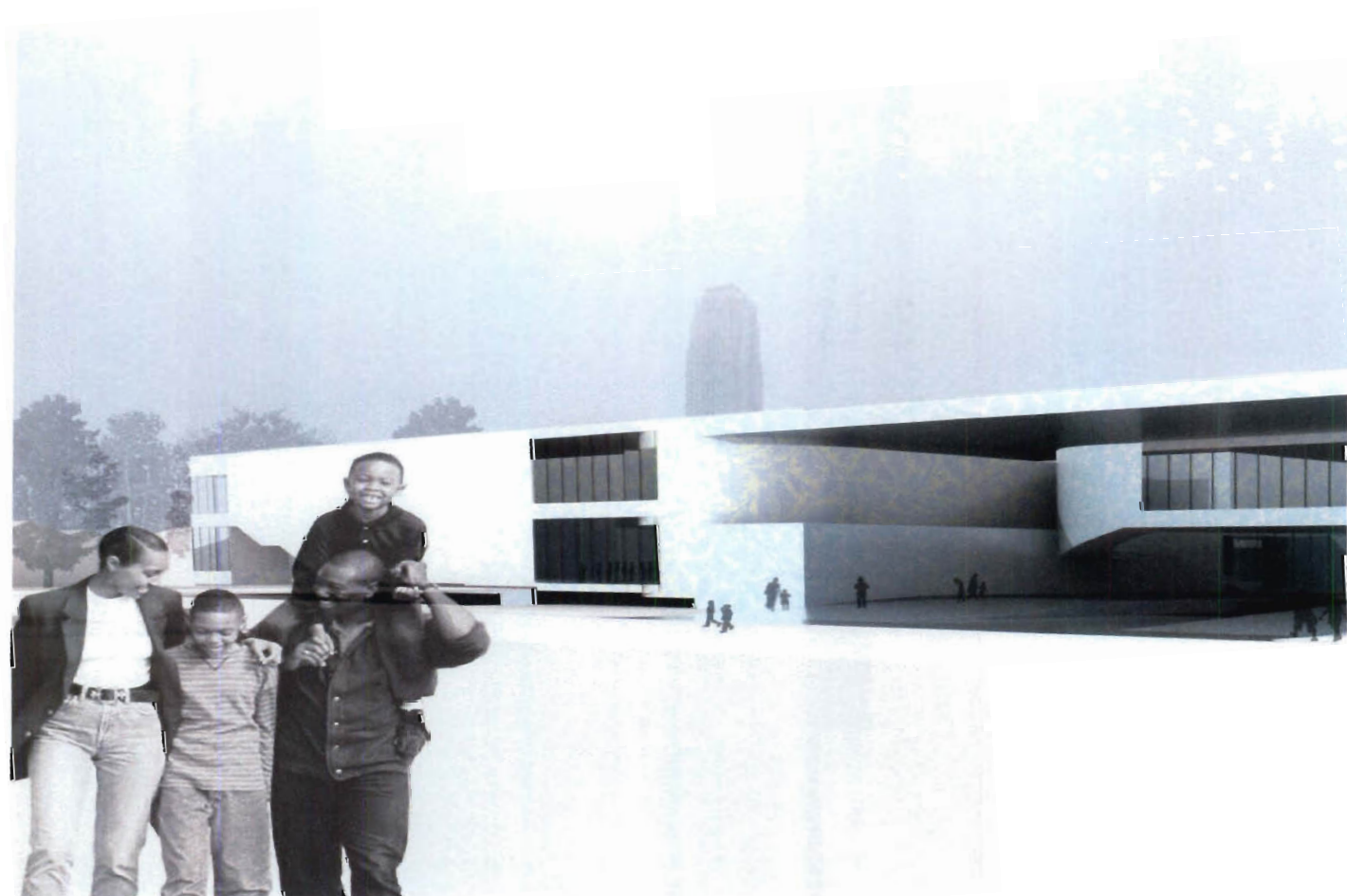


North Elevation



West Elevation





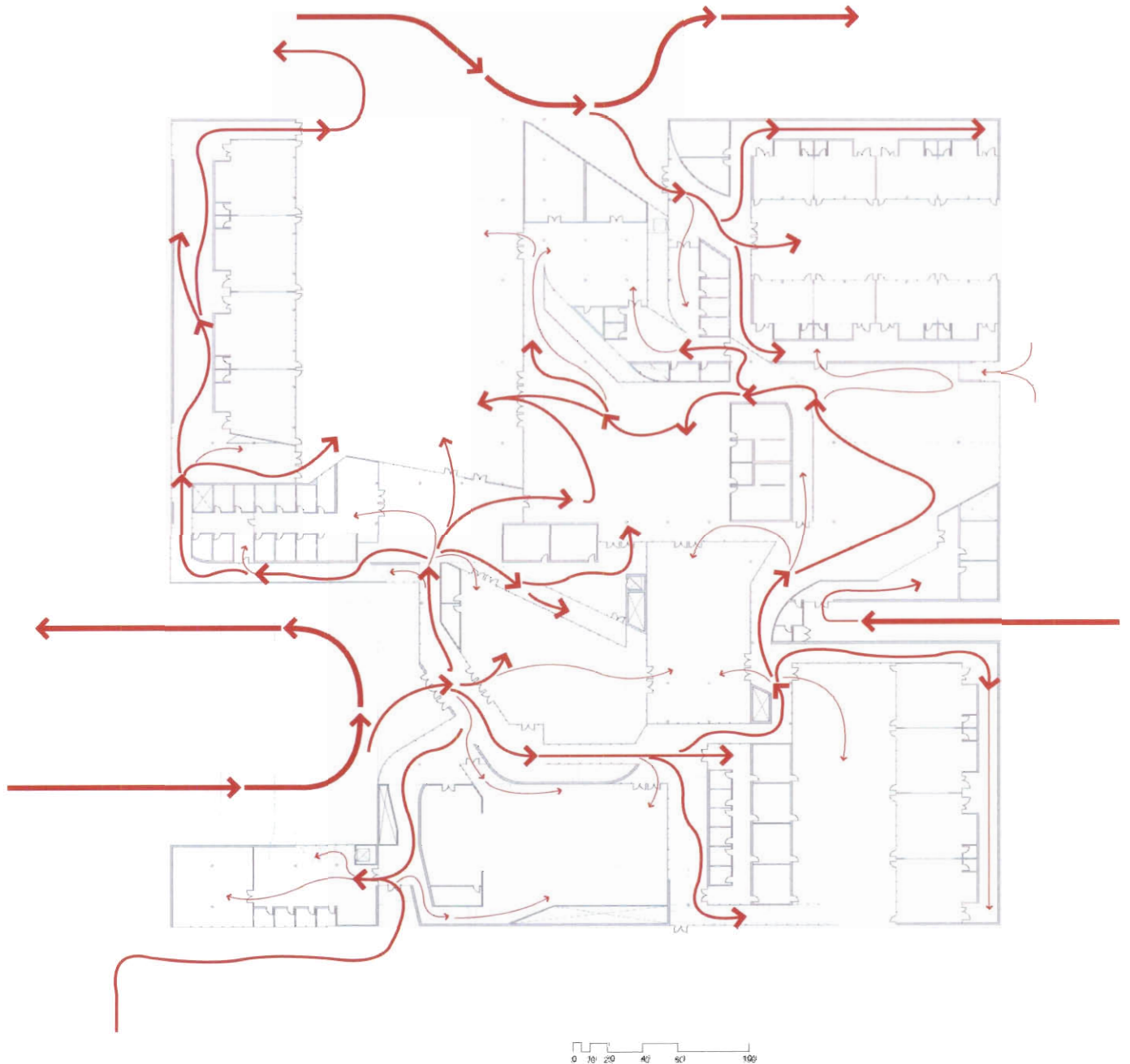
View of Main Entry



**Figural Vortex:**

## Circulation

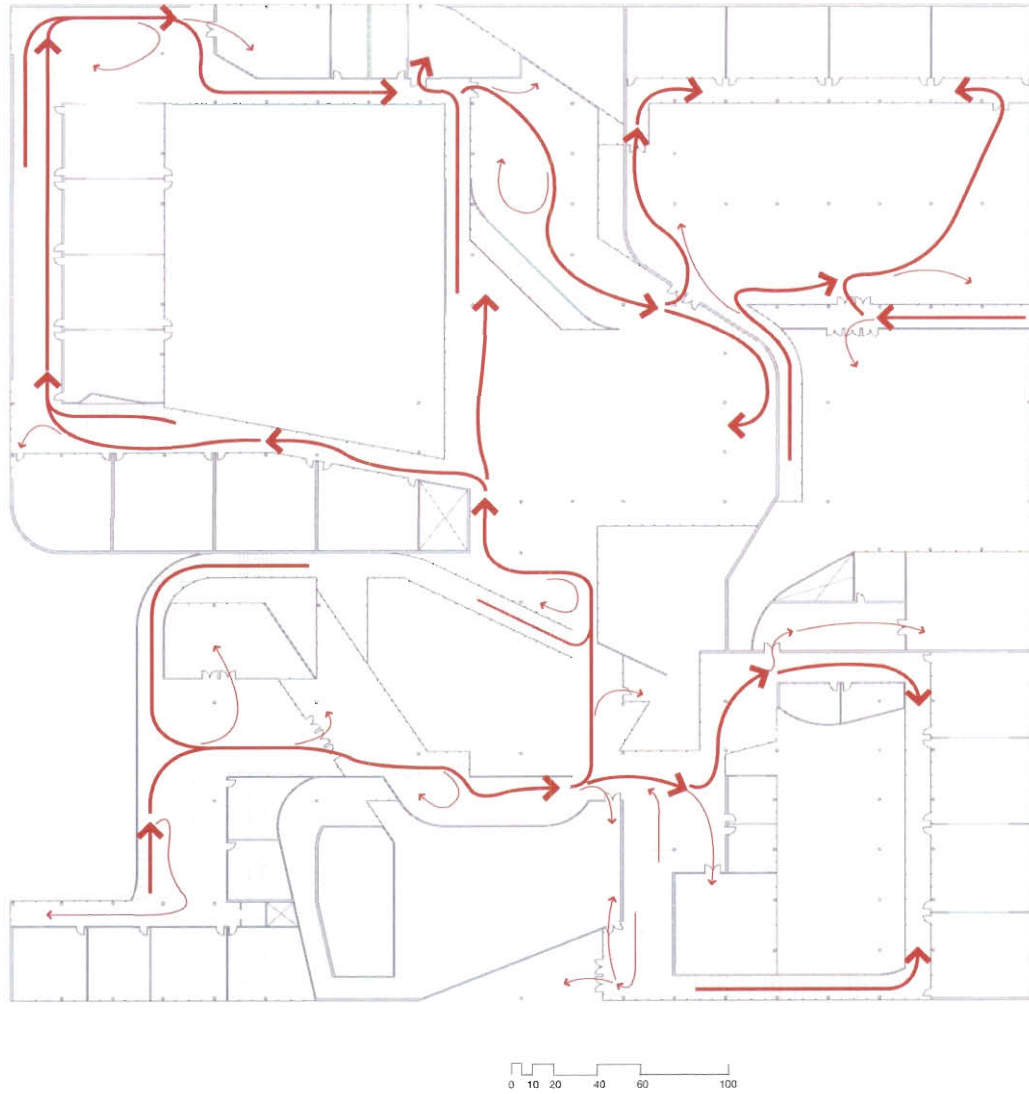
Circulation through the building becomes more rapid and dense the closer it approaches the figural geometry. The trajectories loosen and slow as they move away from the organizing stencil.



**First Floor Plan**

**Figural Vortex:**  
Circulation





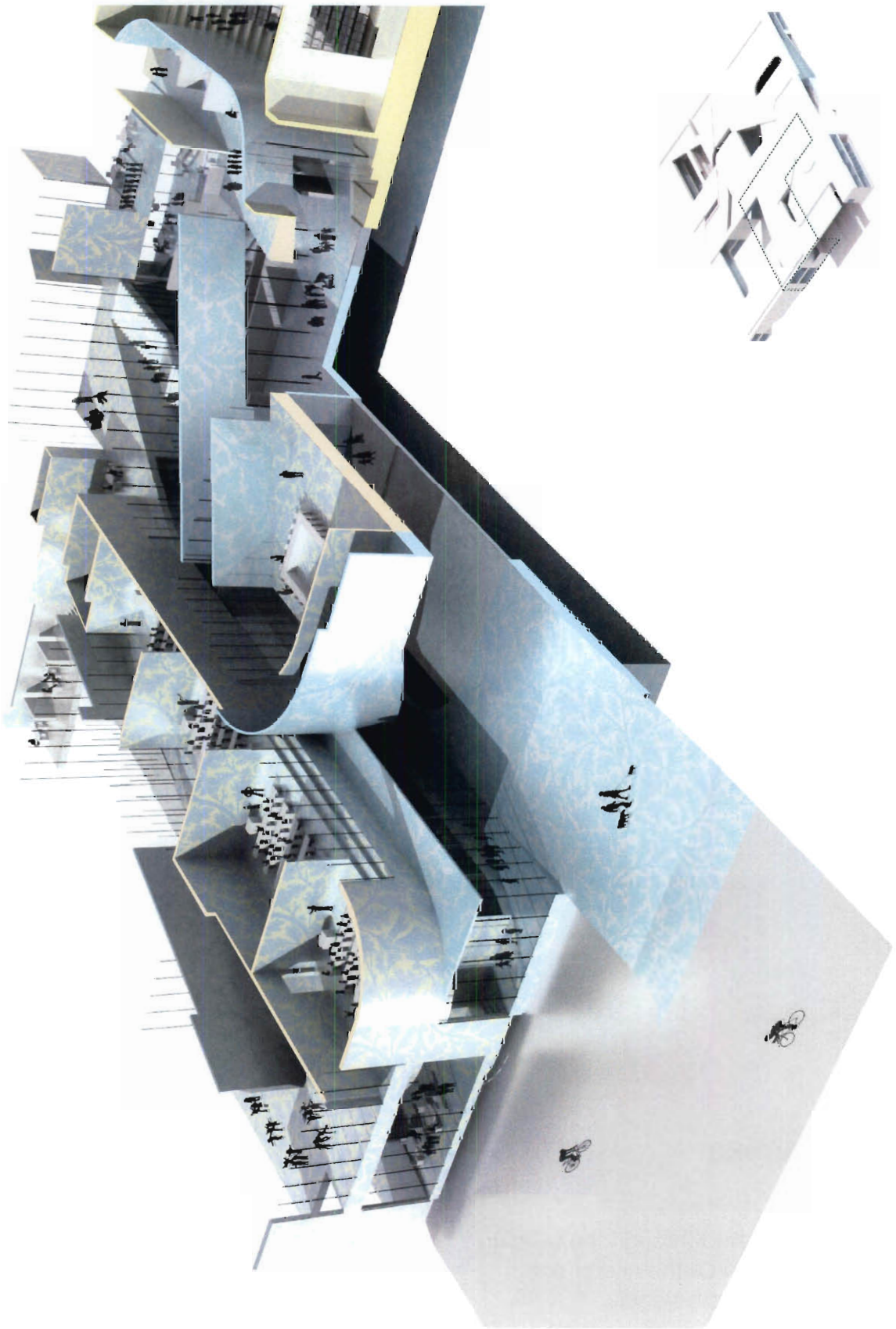
**Second Floor Plan**

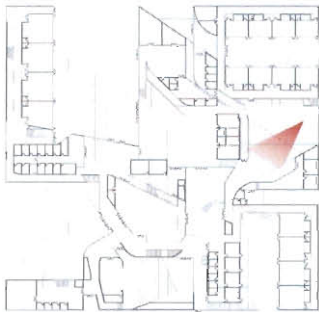


**Figural Vortex:**

## Organization

This system becomes more complex when looking at how these figures come together. This project operates primarily at the level of microsectional transactions and planimetric shifts.

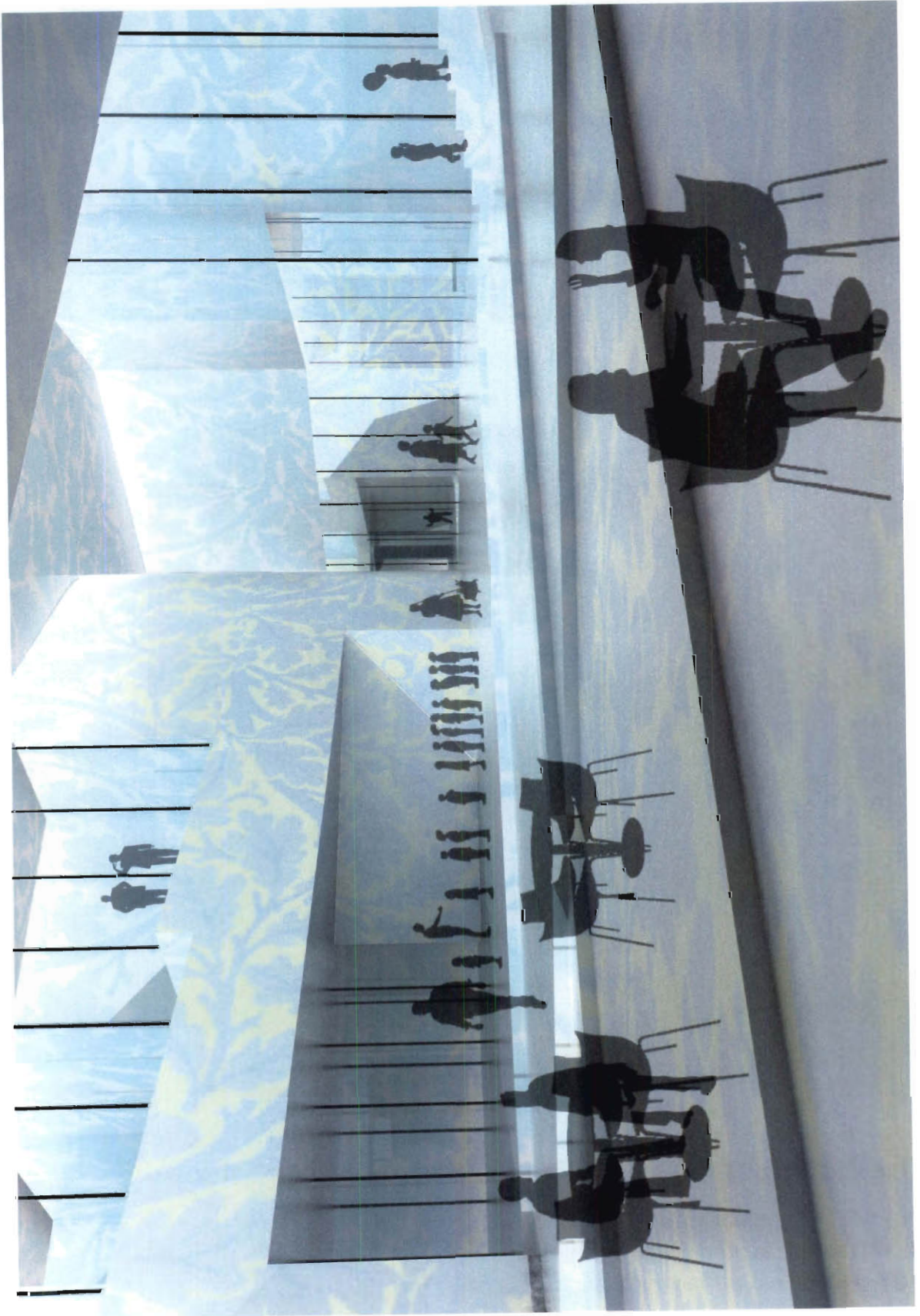


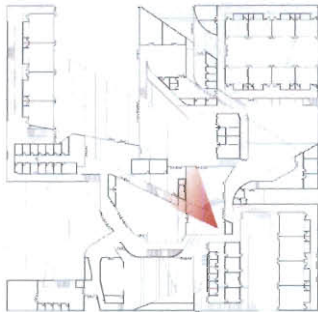


### **Figural Vortex:**

#### **Affect**

Circulation is pulled through the building with increasing force the nearer one approaches a figural stencil.

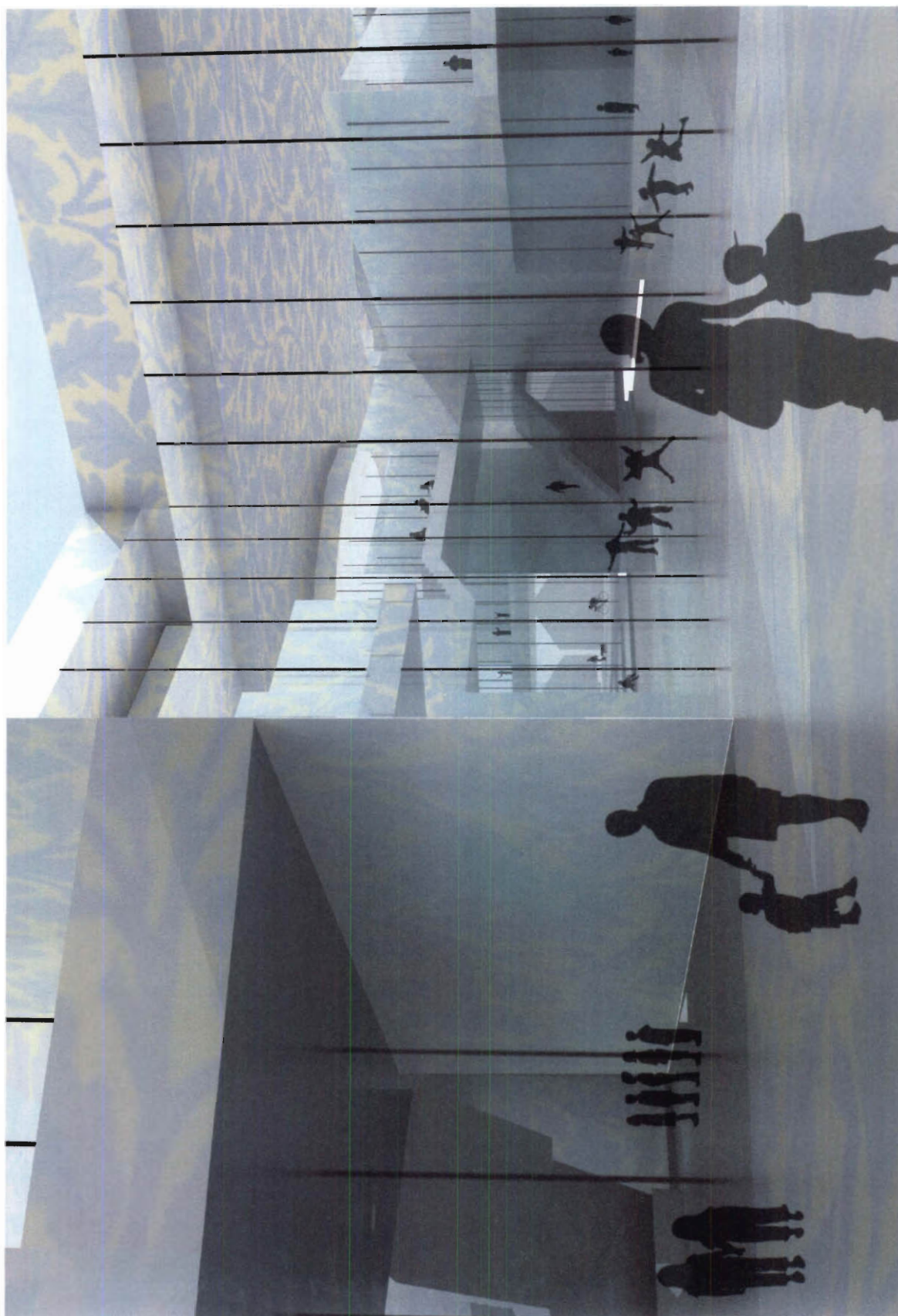


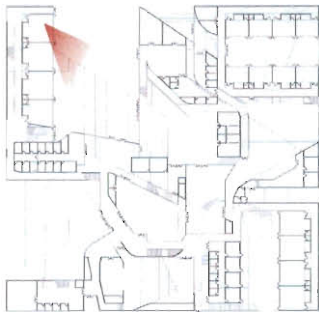


## The Diptych Effect

The primary spatial effect of the multiple figural stencils is a pervasive splitting of organization and perception.







### **Deep Flatness, Flat Depth**

The smooth flatness of the wall planes is given depth by the applied graphics, and perception of the deep, layered views collapses into an image that appears to be projected onto the full height glazing.

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